Innovations in Provider Payment Systems in Transitional Economies: Experience in Suwalki, Poland

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1. Introduction

In response to challenges, opportunities and contextual changes brought about by the transition away from central planning toward market-based economies since the 1980s, the formerly communist states of Eastern Europe and Central Asia have introduced a number of reforms in the finance, management and organization of the health sector [1,2]. Though varying in content and timing, the general direction of reform has been toward decentralization to lower levels of the public sector, privatization of public sector services, greater choice for patients, establishment of new provider payment mechanisms, and introduction of national health insurance [1,2,3]. In most of these countries, the strategies and mechanisms of health sector reform have accompanied or followed broader structural changes in governance, authority relationships and ownership resulting from a combination of social, political and ideological forces [3,4].

One consequence of the four decades of communist rule in the countries of Central and Eastern Europe, characterized by rigorously hierarchical and centrally controlled structures, has been a deep-rooted public distrust of the centralized, governmental state [5]. Reform in these countries has been synonymous in spirit with rapid dismantling of the state apparatus, and with restoration of property and ownership rights [6,7]. Some countries, like Poland, initiated the reform process in 1990 with changes in public administration in ways that moved the center of power and decision-making one step away from the Central Ministries to the provincial, or voivod, levels. Three years later, in 1993, Poland introduced the next change in public administration, by devolving power to local city councils. Other countries, like Hungary and the Czech Republic, embarked on rapid privatization, starting with pharmacies in 1990 and with health care services in general soon thereafter [3]. Whatever may be the differences in pace and extent of reforms, the move toward free markets and privatization has characterized all reform in the Central and Easter European countries, not only in the health sector but also in industry, agriculture, trade and other social services.

Thus, while health-sector financing reforms, particularly those that relate to the different arrangements of paying physicians, have resulted in "only marginal adjustments" in most other countries of Europe, reforms in the formerly communist countries of Central and Eastern Europe have "involved more structural changes" [3]. Innovations in paying physicians in Poland, for instance, have incorporated many features of the ideology of privatization and private markets while introducing the split between payers and providers [8,9]. The separation of finance and provision of health care, involving a shift from salary-based physician employment to private, contractual obligations, found supporters among those advocating this change in the expectation that the new incentives following the reform will lead to a number of important benefits in efficiency and quality of care; it also drew support from the free-enterprise ideologists who were looking at the creation of privately-managed physician practices as natural conclusions in the process of "marketization" [5].

Initial experience with these innovations in Poland highlights the complexity of reality in a transition economy facing macroeconomic structural challenges and balancing high people expectations with rigidities of an inherited system. Evidence from Suwalki, probably the pioneer in introducing innovative physician payment mechanisms in the whole country, indicates that while these reforms have led to significant gains for physicians and widespread acceptability by the patients, payers are finding it difficult to find funds to support these innovations. Initial gains from improved cost-efficiency and a reduction in workforce are becoming increasingly difficult to sustain in the face of leveling-off of efficiency gains and increasing resistance from organized unions, and new sources of funds will have to be found for continuing these innovations. In retrospect, the cautious pace of health reform in Poland has proved to be the right strategy [10], particularly when compared with the many financial, organizational and managerial problems being faced by other transitional economies like the Czech Republic and Hungary, where health reform has been much more rapid.

The experience of early innovations in payment mechanisms in Poland offers valuable lessons for other

provinces in Poland and other transitional countries embarking on similar programs. In particular, it highlights the importance of a balanced approach toward building up "the micro-foundations of change while putting in place structures to create new resources and incentives" [10]. The rest of the paper is organized as follows. The main features of the Polish health care system are presented in section 2. New payment mechanisms introduced in Suwalki since 1993 are described in section 3, followed by an evaluation of these innovations in section 4. The paper concludes with a discussion in section 5.

2. The Polish Health Care System

Like other socialist countries in Central and Eastern Europe, Poland also developed a publicly-funded health system after World War II. Financed by government revenues, the health care production and delivery system offers universal access and broad coverage. The national budget, either directly through the Ministry of Health, or through other ministries like Defense, Interior, Transportation and Industry, supports a huge network of state-financed hospitals and clinics. This network of health services includes more than five hundred integrated health and social service units, called Zespol Opieki Zdrowotnej (zoz), which serve the 49 voivodships, or provinces. Out-patient and primary health services are generally provided in regional clinics, county clinics, local ambulatory clinics, clinic or doctor's offices at the places of employment. Secondary services are provided mainly in voivodship hospitals, while specialized services are provided in university hospitals, medical academies, and science and research institutes.

Historically the entire health system has been organized on a budget basis. Funds have flowed from the central Ministries of Finance and Health to voivods and in some cases, to independent gminas. These voivods and gminas have, in turn, allocated funds to zozs, and in some cases to other providers as well. By and large, the allocation of funds has been on a historical basis, with some adjustments for inflation and epidemiology, and in some cases on basis of population demographics. In most cases, health care has been provided by salaried practitioners. All this set in place a system of incentives and a system of practice in response to these incentives.

First, given the nature of allocation of funds, most voivods and independent gminas and zozs had no incentives to develop fiscal and strategic planning functions. The predictability of budgetary allocations undermined the need to improve managerial and organizational capacity, which has effectively slowed down the process of innovation and ability to respond to environmental changes. Second, the system of compensation based on salaries undermined the importance of effort and productivity. As a consequence, there has been little effort to improve efficiency and quality of care, as a result of which patients face a situation of erratic service. In addition, physician salaries have been kept low, leading to a situation in which physicians look to other sources to augment their salary incomes. And third, reorganization and restructuring of the public sector has been very slow, as a result of which the public health care system continues to be characterized by overstaffing, mis-allocation of resources, underutilization of capacity in some areas and under-supply in others, and shortage of drugs and medical supplies. Patients are dissatisfied with quality of care, restrictions in access and choice of provider, and the increasing practice of unofficial payments required of them. Medical personnel complain of low wages, and many look for alternate employment to complement government salaries. Private practice is common. Supply of physicians in many areas is very insufficient, while other areas have a surplus. Motivation among medical personnel is poor, in part because of the long hours required of some of them and in part because there are no incentives to work more than just a minimum.

In January, 1990, the government in Poland introduced a package of reforms to change the centrally planned communist system into a free market economy. All prices were permitted to move freely, money supply was tightened, the currency devalued, and private entrepreneurship encouraged. At the same time, a number of health system reforms and enabling legislation were introduced in finance, organization and management of health services. These included the establishment of new health care production units (1991 Act), new provider payment mechanisms (1993 Act), greater autonomy to hospitals, decentralization and privatization of public sector in health, introduction of family-oriented general practice, recognition of patient choice, and the introduction of a national health insurance legislation (1997). In the five years since, different provinces and cities of Poland have implemented an impressive variety of innovations, and though the pace and content of reforms has varied across the country, the social and political ideology supporting the basic features of a free market has been a constant theme.

3. New Mechanisms for Paying Physicians in Suwalki

Suwalki was one of the first provinces to seize upon the initiative provided by the enabling legislation and introduce changes in ways physicians were paid. Using the instrument of contracts to achieve the separation of functions of provision and finance, and at the same time ensure that both aspects work in harmony for betterment of the patient, Suwalki started experimenting with new payment methods in 1993. Paying government physicians by any other method except salaries was not possible in existing regulations governing state employees, and thus any physician accepting alternative methods of payment first had to resign from government service. A new law enabling the public sector to contract with private medical staff and pay them from state resources had already been passed in 1991. Known as the Health Care Units Act of August 1991, this laid the theoretical and institutional basis and foundation for different experiments in financing and management of health care, including issues related to provider payments. On August 5, 1993, the Ministry of Health and Social Welfare issued an ordinance, under Article 35 of the Health Care Institutions Act of 1991, regulating the general conditions and procedures for contracting of health services. The ordinance empowered a state administration unit, voivod, gmina or a union of gminas (or "employers") to enter into contracts with physicians, dentists, and other members of the medical profession. Drawing on these enabling legislation, Suwalki offered contracts to physicians and other medical personnel that described the new ways of paying the physicians, and laid down such other conditions as the nature and quantity of services, compensation package, provisions for maintaining quality standards, regulation, and duration of the agreement.

Of the 867 physicians and dentists in Suwalki voivodship, new payment mechanisms were worked out for 246 (28.4%) physicians and other personnel as of December 31, 1996. The first batch of 6 dentists resigned in 1993 from regular employment with the zoz and entered into a contract with Suwalki voivod. The number of physicians and other medical personnel who left regular zoz and voivod employment and signed contracts with the same or other zoz or voivod increased to 34 in 1994, 103 in 1995, and 246 in 1996.

A variety of different ways have been used to pay physicians and other medical personnel opting to move out of salary compensation. These are (i) fee-per-visit; (ii) fee-per-procedure; (iii) fee-per-day; and (iv) a "mixed" system, i.e., capitation and fee-per-procedure. We discuss these in turn.

(i) Fee-per-Visit

As of December 31, 1996, there were 43 emergency care physicians and 36 specialists under contract who were paid on the basis of fee-per-visit. This fee is negotiated between the voivod or the zoz and the physician using a "point" system, and covers all procedures that the physician may carry out during the visit. A fixed number of points are accorded for each patient visit as well as home visit by the physician. Additional points are based on factors such as location of practice, the number of medical practitioners in the area, and distance traveled by the physician. The zloty value of a point is negotiated between the payer and the physicians, and is the same for all physicians. The physician is responsible for all costs of the visit, including space rental, equipment, emergency drugs, other medical and non-medical supplies, paramedical staff, etc. There is no limit to the total points that a physician can accumulate under this system. However, with the exception of emergency care, patients visiting contract physicians under this system need to have a referral from a general practitioner.

(ii) Fee-per-Procedure

As of December 31, 1996, there were 92 specialists, dentists and medical technicians who were being paid on the basis of fee-per-procedure. Negotiated between the voivod or the zoz and the physician, the fee is calculated on the basis of "points" that are computed according to the value of time, materials, equipment and knowledge required for the procedure. Each point is allotted a zloty value, which varies according to procedures, and is computed such that the total fee for the procedure is not very different

from the average departmental cost of the procedure. Unlike fee-per-visit, there is a limit to the number of points that can be accumulated annually.

(iii) Fee-per-Day

Physicians on night shifts in the hospital are paid a fee-per-day, and as of December 31, 1996, there were 32 physicians on night-shift duty contracts. Physician compensation is a negotiated rate between the voivod or the zoz and the physician, and historical average costs are used as the basis for computing fee-per-day.

(iv) Mixed System

General practitioners on contract in Suwalki are paid according to a mixed system that has three components: capitation, fee-per-visit and a lumpsum payment depending on inoculation coverage of the population. As of December 31, 1996, there were 27 general practitioners who were paid according to this system. Physicians under this type of contract provide the full range of primary services for their patients, but are not responsible for expenses relating to diagnostic tests, specialist consultations, and ambulatory surgery.

The capitation rate is based on number of enrollees, age of the enrollee, physician's specialization and physician's seniority. Each enrollee up to the first 2,500 is allotted 1 point, followed by 0.2 points for the next 500 enrollees, 0.1 points for the next 500 and nothing thereafter. An extra 0.5 points are allotted for each enrollee below 6 years and above 65 years of age. Physicians with extra specialization at step 1 (diploma) and step 2 (advanced degree) get additional 0.025 and 0.05 points per enrollee respectively. An additional 0.01 points per enrollee is given to physicians who have worked for more than 5 years at the facility. The minimum number of persons that a physician must enroll to qualify to be on such a contract is 1,000. There is no maximum limit.

The second component in physician's compensation is fee-per-visit. Points allocated to a visit are scaled according to three types of visits: by the patient to the physician's practice, home visit by the physician within the town, and home visit by the physician outside of town. These visits are typically worth 0.6 - 0.8 points, 1.2 - 1.6 points, and 2.4 points, respectively. There is no variation in the point value of the visit according to the type of patient or nature of treatment.

The third component in the reimbursement package is based on the extent of inoculation coverage and preventive services offered by the physician, who can earn additional points for age-specific immunizations, screening for breast cancer, monitoring diabetes and blood pressure, and yearly checkups for children under the age of 18. Points are generated according to population coverage, and vary from 200 points per month if the population covered is upto 60% of the total number of enrollees to 800 points if the entire population is covered.

Total number of points that a physician can accumulate is the sum of points generated according to each of the above, but cannot exceed 42,800 points in a year. The value of a point is negotiated every year, and in 1996 each point was worth between ZI 1.0 and ZI 1.5.

4. Analysis

We use a number of parameters to assess the impact of these reforms in paying physicians and other personnel. We start by examining the impact of these innovations on earnings of physicians, dentists and paramedical staff in Suwalki. We hypothesize that for a physician to accept a new method of compensation and give up a salaried job, the total remuneration offered must be higher than the gross salary in regular employment. If this is indeed the case, total expenditure of the zoz on personnel compensation can also be expected to increase, unless these innovations are accompanied by cost-saving elsewhere. The next issue we explore, therefore, is identification and analysis of the additional source of funds or savings. The most likely candidates for cost-saving are reduction in staff and decrease in unit costs, and these are examined next. For the former, we compare staffing patterns over the years for a broad range of personnel. For the latter, we assess cost-efficiency by comparing unit and total costs of similar services offered by salaried and contract employees. And finally, in order to evaluate the impact of new compensation methods on patients, we examine the changes in quantity and quality of services offered by contract personnel and compare that with salaried personnel in the zoz.

(i) Physician Income

The starting salary of physicians in Suwalki in 1996 was around 12,000 zl.per year in 1996, inclusive of social security contributions and taxes paid on their behalf by the employer. A physician with around ten years tenure received a gross salary of approximately 18,000 zl. Net income after taxes and social security deductions was about 65% of the gross, i.e., approximately 11,700 zl. per year, or 975 zl. monthly.

In comparison, non-government physicians on fee-per-visit contracts earned between 32,000 zl. and 45,000 zl. per year, depending on the fee and the number of visits, both of which varied considerably within the same specialization and across specializations. An oculist under contract in Wydminy, for example, received 4.02 zl. per visit, and recorded 8,080 visits in 1995 for a gross annual income of 32,482 zl. In the same period, a contract oculist in Banie Mazurskie received 8.0 zl. per visit, and had 5,132 visits for a gross annual income of 41,056 zl. In the gmina of Mikolajki, contract orthopedic surgeons (fee 13 zl., 224 visits in March, 1996), laryngologists (fee 4.0 zl., 322 visits), gynecologists (fee 5.6 zl., 359 visits) and dermatologists (fee 3.5 zl., 269 visits) earned 2,912 zl., 1,288 zl., 2,010 zl. and 942 zl. respectively per month. Most physicians under contract thus earn significantly more than salaried physicians, and even after paying taxes, insurance and social security contributions (optional), their net income is higher compared to salaried physicians.

(ii) Flow of funds: finding resources for contract payments

The total budget for the health sector in the Suwalki voivodship has been increasing in monetary terms over the last 4 years. The allocation in 1993 was 72.34 million zl., which increased by 40% in 1994 to 101.27 million zl., by 40% again in 1995 to 140.11 million zl., and by 17% in 1996 to 165.47 million zl. However, high inflation rates of 131% in 1994, 31% in 1995 and 20% in 1996 reduced the real value of this allocation, so that in real terms, budgetary allocation for the health sector actually fell by 40% in 1994, increased by only 4.7% in 1995, and remained more or less steady in 1996.

The biggest component of the budget is salaries, which accounts for almost 60% of the total. The salary "paragraph" (or head-of-account) includes base salary (paragraph 11), bonus (paragraph 17), taxes paid by the employer on behalf of the employee (paragraphs 41 and 42), and social security contributions (paragraphs 43). Taxes and social security payments account for approximately 33% of gross salary, while bonus amounts to approximately 4% (half month's pay).

A new paragraph (paragraph 44) was created for payment of private physicians and other personnel, but there were no specific direct allocations in 1994 and 1995 under this head-of-account. The zozs were required to make appropriate transfers from other budget paragraphs in the budget, the natural candidate for this being the salary component. In 1994, however, only Gizycko zoz transferred funds from the salary paragraphs to paragraph 44, the other zozs drawing funds from other paragraphs. In 1995, while 3 other zozs moved some funds from the salary component for payment to physicians under contract, Gizycko zoz actually reduced transfer from the salary paragraph to only 18.18% of the required amount, even though in the previous year the zoz had correctly used only the salary head of account to pay all physicians under contract. In 1996, all 11 zozs moved some funds from the salary paragraphs to paragraph 44; however, the percentage of required funds transferred varied from 85% in Wgorzewo to 19% in Sejny, for an overall figure of 25%. Bulk of the money required to pay contract personnel came from other paragraphs, principally the supplies head-of-account.

The continuing inability of the zoz Directors to transfer funds from the salary paragraphs can partially be explained by two factors. First, the zoz Directors face tremendous pressure from the unions against transferring funds from the salary account, since the amount of bonus that employees get depends in large part on the surpluses generated in the salary head-of-account. Second, since most of the supplies continue to come from state-owned firms even after the transition to a market economy, there seems to be some complacency in running up debts in the expectation that the government would eventually meet the deficit. Thus, while more than 25% of physician salary budget was freed in "privatizing" physicians and moving them from regular state employment to contracts, a major part of this saving was used for additional compensation of existing personnel. In addition, the supplies budget was diverted toward physician compensation. In other words, the practice of contracting a few physicians, dentists and paramedical personnel led to marginally higher compensation for the remaining employees, a large part of which was financed by increasing debts.

(iii) Reduction in Work Force

Innovations in physician payment has led to a significant reduction in workforce in at least one zoz. More than 75% of all medical and paramedical personnel in Goldap zoz are under contract, which is the highest percentage under contract in all zozs in Suwalki voivodship. In 1992, Goldap had a total of 91 medical and paramedical personnel, all of whom were on salary employment. Goldap started contracting in 1993, and by 1996, there were 53 individual contracts in force and only 18 persons were on salary employment. In other words, in the first four years of privatizing physician services (1993-1996), Goldap experienced a reduction in staff of 22%.

On closer scrutiny, the figures reveal that most of those who were retrenched were paramedical staff. In particular, 29% of X-ray technicians, 63% of laboratory technicians, 75% of paramedical staff in the surgical ward, and 80% of assistants in the gynecology ward were laid-off. In comparison, only 17% of dentists and 17% of general practitioners were compulsorily retired. Many paramedical staff who were laid-off were subsequently re-hired by physicians on contract, and received higher salaries than they were getting in zoz employment. However, in the absence of any authoritative figures, it is difficult to make any assessment and evaluation of the impact of contracting on the employment figures.

Other zozs report similar trends, though accurate figures are not available.

(iv) Decreased Unit Costs

Average costs of visits in general outpatient, specialist outpatient, dentistry, and emergency care departments in Suwalki are calculated by dividing the total recurrent expenditure in each department by the number of visits or procedures in that department. Costs of visits and procedures by private

physicians under contract are calculated in the same manner. In all cases where contracts were signed between the zoz and private physicians or technicians, unit costs of visits and procedures came down, in some cases by as much as over 73% (emergency visits).

Table 1: Unit costs of visits/procedures, Suwalki, January-March, 1996 Department

	Salaried (zloty)	Contract (zloty)	Saving (%)	Payment Type
Dentures	150.14	68.82	54.16	Fee-per-procedure
General Dentistry	17.72	12.07	31.88	Fee-per-visit
Dental Surgeon	31.21	20.03	35.82	Fee-per-procedure
General Practitioner	12.36	5.51	55.42	Mixed
Emergency Care (home visit)	76.24	20.57	73.02	Fee-per-visit
Emergency Care (hospital)	29.99	26.25	12.47	Fee-per-visit
X-Ray (chest)	8.9	8.6	3.37	Fee-per-procedure
USG (abdomen)	9.5	9.1	4.21	Fee-per-procedure

(v) Impact on Quantity and Quality of Services

The number of services supplied by private physicians, dentists and paramedical personnel on fee-for-service, fee-for-procedure and capitation contracts is significantly higher than their salaried counterparts. In Goldap zoz, for instance, the number of consultations and visits recorded by contract dentists on fee-for-visit (7310 visits in 1994, 9080 in 1995) was more than double of consultations provided by salaried dentists (3823 in 1994, 4340 in 1995). Similarly, the average number of dentures prepared per month in 1995 by contract technicians in Goldap were 312 compared to 144 by salaried technicians. Likewise, while employed general practitioners made 38 home visits a month, general practitioners on contract made 311 home visits.

A comparison of quality between services offered by physicians paid according to any of the new methods and salaried physicians is difficult, as there is no data that would enable such an analysis. While all contracts require the physicians to maintain certain records and make those records available for inspection when called for, it is not clear what type of information is expected to be obtained from these records, and what use it will be put to. For instance, the contract with emergency care physicians requires the physicians to maintain a departure chart as is customarily maintained in hospitals. The departure chart along with the first page (yellow) of the medical records is required to be given to the emergency office on completion of the service. General practitioners, dermatologists, dentists and radiologists are required to keep all statistics and medical documentation which conform to the rules in public health care and cost accounting.

Provisions for quality control are even less explicit and clear. For instance, clause 19 of the emergency care physician contract empowers the principal to check for quality control, but does not specify how this inspection would be carried out or what it entails. The contract with dentists simply states that the physician is "obliged to use standard materials" (clause 4:4), and have business offices and equipment that conform to "the standards in health care system" (clause 20). Similarly, the contracts with dental surgeons and radiologists also require the physician to use equipment that conforms to "standards in

health care system" (clause 19 and 24 of dental surgeons contract, clause 24 of radiologist contract). These standards are, however, not specified anywhere.

As has been noted above, the number of services provided by contract personnel is higher than salaried staff, and to this extent there would probably have been a reduction in patient waiting-time, particularly for such services as dentures and dental visits. Further, patient satisfaction surveys conducted in 1997 by the Bialostok Academy of Medicine also suggest that patients were broadly satisfied with services provided by physicians and paramedical staff on contract with the voivod or the zoz.

5. Discussion

Innovations in paying physicians has resulted in significant monetary gains in terms of gross earnings for physicians and other personnel who left their salary employment and signed contracts with the voivod and zoz Directors. In the absence of detailed cost estimates of practices of contract personnel, it is difficult to make a conclusive statement about net earnings; however, the fact that so many personnel signed contracts and many more are keen to enter into contracts and give up their regular employment indicates that the net payoff in contract employment must be higher than regular state employment.

Changes in paying physicians also appears to have resulted in gains for the patients, with the biggest benefits coming from the increase in access and availability of health care providers. There has been an overall increase in the availability of and the number of services provided by contract personnel, especially by dentists, dental technicians, and general practitioners. As a result, waiting time in general has come down, and patients get faster services. It is, however, too early to make any definitive statements about quality improvements, though the general impression seems to support greater patient satisfaction with services provided by contract personnel.

As far as the payers are concerned, reforms in paying physicians has resulted in many *first-order*, or direct and observable, gains. First, these reforms seem to have resulted in improved physician availability and probably quality of services. Second, from the perspective of strategic management, a direct benefit for the payer has been the certainty of expenditure under a system that entails contracts with private physicians. With most zozs ending each fiscal year with substantial debts, the no-debt nature of contracts provide a very desirable alternative, and makes planning and financial management easier and more meaningful. And third, contracts offer a direct financial saving. Unit costs of almost all procedures and visits carried out by contract personnel are lower than the costs of similar procedures done by regular staff. Physicians under contract bear all costs of all procedures they are required to deliver, and thus have appropriate incentives to keep costs down.

However, these gains have been accompanied by some *second-order* concerns, that are less obvious and visible in the short-run. First, it is not clear how much of the reduction in costs is due to "cream-skimming" (treating only low-cost patients), "skimping" (providing less than complete treatment) and "dumping" (transferring high-cost patients to the public facilities). Second, much of the financial savings resulting from reduction in unit costs are being wiped out by a general increase in the quantity of services provided. Third, workers' unions attribute most losses in jobs of paramedical staff to payment reforms and contracting, and are now rallying behind the remaining staff to make further retrenchment very difficult.

Perhaps the most serious implication of the payment innovations has been the inability of the zoz Directors to transfer funds from the salary head-of-account to pay contract personnel. Savings from increased cost efficiency and reduction in workforce have not been sufficient to sustain the increased budgetary pressures brought about by contracting in Suwalki, and in the absence of increased budgetary allocations from the Ministry of Health, these zoz Directors have used funds meant for general supplies to finance contracts. This has not been a problem so far, since physician contracting is still to have a significant impact on the finances of either the Suwalki voivod or any zoz. A sum of zl 3.45 million zl. only was set aside in the 1996 health budget of various zozs for payment to physicians and other medical personnel on contract. This represents only 2% of the total budgetary allocation of 165.47 million zl. in 1996, and only 6% of salary budget of the zozs for this year. However, at the rapid pace at which the number of contract physicians is increasing, it is only a matter of time that the voivod and zoz will have to find other means of finding the necessary funds. For instance, paying physicians and other personnel on contract in 1997 is budgeted to cost 7.81 million zl., or 14% of the salary budget, and is expected to increase to 20% of the salary budget by 1998. If zoz Directors are unable to generate enough savings from within the salary head-of-account by this time, it is doubtful if they will be able to pay all contract personnel without adversely affecting resource availability elsewhere in the zoz.

In conclusion, the experience of Suwalki with innovative methods of paying physicians raises a number of important issues and offers many lessons relevant to other voivods and zozs in Poland as well as other transition economies in Eastern Europe. First, there appear to be many advantages for patients and physicians following privatization of physician services in Suwalki. It is shown that the quality and quantity of services has generally increased after physicians left their regular state employment and signed contracts, and the physicians and other personnel on contract are financially better-off compared to salaried staff. Second, these reforms have been accompanied by a reduction in unit costs for most services. Evidence from Suwalki indicates that the private sector is capable of delivering services at lesser costs than the public sector. Third, these changes in paying physicians and other personnel has resulted in a reduction in workforce, not of physicians but of the paramedical staff. In countries like Poland where workers' unions play a dominant role in the country's politics, privatizing is increasing being perceived to be a threat to solidarity and union power, and to that extent is politically vulnerable. Fourth, unless accompanied by committed sources of funding, introducing new payment methods that raise individual earnings is bound to become a drain on available resources and have an adverse impact elsewhere in the system. And finally, while engaging the private sector can potentially meet the production and delivery shortfalls in the government sector, many of the benefits are likely to be mitigated if not accompanied by monitoring and quality control.

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